## Colors of Common ions

| $\mathrm{Fe}^{2+}$ and $\mathrm{Fe}^{3+}$ | various colors |
| :--- | :--- |
| $\mathbf{C u}^{2+}$ | blue to green |
| $\mathbf{C r}^{2+}$ | blue |
| $\mathbf{C r}^{3+}$ | green or violet |
| $\mathbf{M n}^{2+}$ | faint pink |
| $\mathbf{N i}^{2+}$ | green |
| $\mathbf{C o}^{2+}$ | pink |
| $\mathbf{M n O}_{4}{ }^{-}$ | dark purple |
| $\mathbf{C r O}_{4}^{-}$ | yellow |
| $\mathbf{C r}_{2} \mathbf{O}_{7}{ }^{2-}$ | orange |

## Flame Tests for Elements

| BLUE |  |
| :--- | :--- |
| Light blue | Arsenic and some of its compounds, selenium |
| GREEN |  |
| Emerald Green | Copper compounds other than halide |
| Green/blue | CuBr2, arsenic, lead, antimony |
| Yellow-green | barium |
| RED |  |
| Carmine | lithium compounds |
| Scarlet | calcium compounds |
| Crimson | strontium compounds |
| VIOLET | Some potassium compounds |
| YELLOW | Sodium |

